

BPA Attachment K Planning Process

Planning Meeting II

November 18, 2015



Agenda

- Introductions
- Attachment K Planning Cycle – 2015
- Attachment K Website
- Economic Study Requests
- Draft Plans of Service for Transmission
- Updates to Previous Projects
- Next Steps



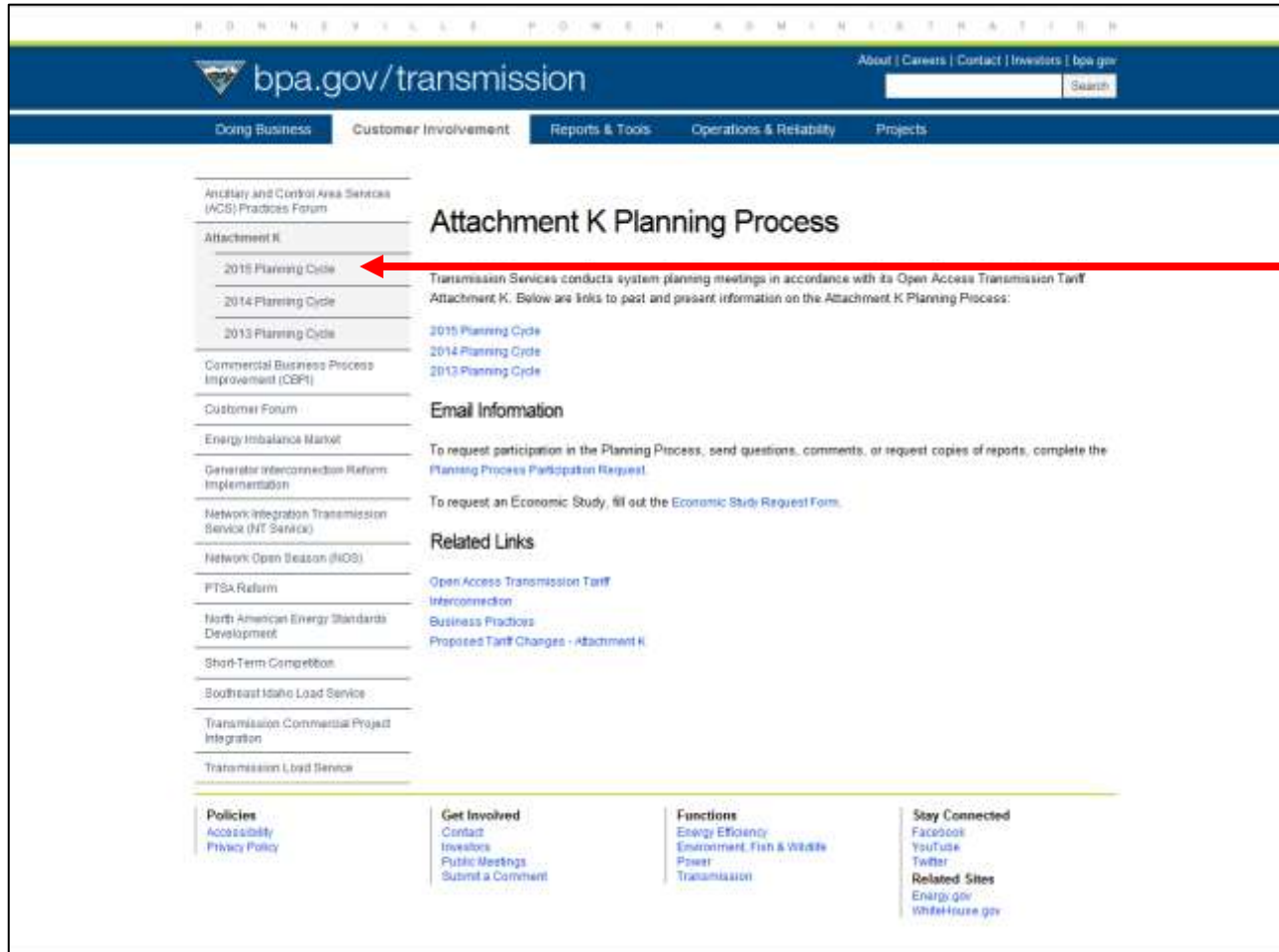
Attachment K Planning Cycle - 2015

- **Customer Meeting I** **April 28, 2015**
 - 2014 BPA Plan
 - Planning Assumptions, Criteria, Methodology
 - Economic Study
- **Posting I** **October 2015**
 - Summary of System Assessment Results and Conceptual Solutions
- **Customer Meeting II** **November 18, 2015**
 - Draft Plans of Service and Costs
 - Economic Study Requests
- **Posting II** **End of Year 2015**
 - Draft BPA Plan for 2015



BPA's Attachment K Planning Process Website

<http://www.bpa.gov/transmission/CustomerInvolvement/AttachmentK/Pages/default.aspx>



The screenshot shows the BPA website's 'Attachment K Planning Process' page. The header includes the BPA logo and navigation links like 'About | Careers | Contact | Investors | bpa.gov'. The main navigation bar has tabs for 'Doing Business', 'Customer Involvement', 'Reports & Tools', 'Operations & Reliability', and 'Projects'. The left sidebar lists various services, with 'Attachment K' expanded to show '2015 Planning Cycle', '2014 Planning Cycle', and '2013 Planning Cycle'. A red arrow points to the '2015 Planning Cycle' link. The main content area is titled 'Attachment K Planning Process' and contains text about system planning meetings, links to past and present information, and sections for 'Email Information' and 'Related Links'. The footer includes links for 'Policies', 'Get Involved', 'Functions', and 'Stay Connected'.

Attachment K Planning Process

Transmission Services conducts system planning meetings in accordance with its Open Access Transmission Tariff Attachment K. Below are links to past and present information on the Attachment K Planning Process:

2015 Planning Cycle
[2015 Planning Cycle](#)
[2014 Planning Cycle](#)
[2013 Planning Cycle](#)

Email Information

To request participation in the Planning Process, send questions, comments, or request copies of reports, complete the [Planning Process Participation Request](#).

To request an Economic Study, fill out the [Economic Study Request Form](#).

Related Links

[Open Access Transmission Tariff](#)
[Interconnection](#)
[Business Practices](#)
[Proposed Tariff Changes - Attachment K](#)



Navigating BPA's Attachment K Planning Process Website

<http://www.bpa.gov/transmission/CustomerInvolvement/AttachmentK/Pages/2015-Planning-Cycle.aspx>

The screenshot shows the BPA Transmission Customer Involvement Attachment K Planning Process Website for the 2015 Planning Cycle. The website has a blue header with the BPA logo and navigation links: About | Careers | Contact | Investors | Sign up. Below the header is a navigation bar with links: Doing Business | Customer Involvement | Reports & Tools | Operations & Reliability | Projects.

The main content area is titled "2015 Planning Cycle". It includes a sidebar with a list of links:

- Acquisition and Construction Services (ACCS) Project Page
- Attachment K
 - 2015 Planning Cycle
 - 2014 Planning Cycle
 - 2013 Planning Cycle
- Commercial Business Process Improvement (CBPI)
- Customer Forum
- Energy Information Market
- Generator Interconnection System Implementation
- Network Integration Transmission System (NITS) System
- Network Open Access (NOA)
- PTES Reliability
- North American Energy Standards Development
- Short-Term Coordination
- Southwest Idaho Load Service
- Transmission Commercial Project Eligibility
- Transmission Load Service

The main content area includes the following sections:

- 2015 Planning Cycle**: A paragraph explaining that Transmission Services conducts system planning meetings in accordance with the Open-Access Transmission Tariff (Attachment K). These meetings provide customers and interested parties the opportunity to discuss and provide input to the studies and development of the plan of service. Beginning in 2014, the Attachment K Planning cycle shifts from a biennial to an annual cycle.
- This page provides information about the Transmission Services Attachment K process including notifications of meetings, results of planning studies, plans of service and other reference information. To request participation in the Planning Process, complete and email the [Participation Request form](#).**
- Meetings**:
 - November 18, 2015**:
 - [Agenda](#)
 - April 28, 2015**:
 - [Agenda](#)
 - [Attachment K Planning Meeting Presentation](#)
- Economic Studies**:
 - The Economic Study is available as of October 2015.
 - To request an Economic Study, fill out the [Customer Study Request Form](#).
- Reference Information**:
 - 2015 System Assessment Summary (SAS)
 - [Requesting a System Assessment Assessment & Refinement](#)
- Related Links**:
 - FERC Order 1003
 - FERC Order 696
 - NRCC Reliability Standards
 - Open-Access Transmission Tariff (Attachment K)
 - Planning Studies
 - NRCC Reliability Criteria
 - Proposed Tariff Changes - Attachment K
 - Attachment K Transmission Planning Process Business Practice

The footer contains four columns of links:

- Policies**: Accessibility, Privacy Policy
- Get Involved**: Contact, Investors, Public Meetings, Notice & Consultation
- Features**: Energy Efficiency, Environment, Fish & Wildlife, Transmission
- Stay Connected**: Facebook, YouTube, Twitter, RSS/Email, [Sign up for Whitehouse.gov](#)



BPA's Attachment K Planning Process Website

- **E-mail Information**
 - PlanningParticipationRequest@bpa.gov
 - PlanningEconomicStudyRequest@bpa.gov
- **Meetings**
 - Meeting announcements, agendas, etc.
- **Economic Studies**
 - Requesting and Tracking Economic Studies
- **Reference Information**
 - Materials associated with the Planning Process, participation forms, etc.
- **Related Links**
 - Links to information related to the Planning Process



Economic Study Requests

- What is an Economic Study?
 - Studies may be requested to address congestion issues or the integration of new resources and loads.
- How are Requests for Economic Studies submitted?
PlanningEconomicStudyRequest@bpa.gov
- Requests may be submitted any time...

Requests submitted after October 31 will be considered in the next prioritization process.
- BPA will complete up to two Economic Studies per year at its expense.
- There were no Economic Study Requests received during the study cycle which closed on October 31, 2015.



Draft Plans of Service

(2015 Planning Cycle)

- The following draft plans of service have been developed to maintain compliance with the applicable planning reliability standards and criteria
- The following standards and criteria were applied in development of the proposed corrective action plans:
 - NERC TPL Reliability Standards
(North American Electric Reliability Corporation)
 - WECC Reliability Criteria
(Western Electricity Coordinating Council)



Vancouver Area

North Bonneville-Troutdale 230 kV No. 2 Line Re-termination

- Estimated Cost: \$2,000,000
- Proposed Energization: 2016
- This project re-terminates a 230 kV line (From the west to the east 230 kV bus section at North Bonneville Substation).
- This project will improve reliability for the Vancouver area.



Salem/Albany Area

Salem-Albany 115 kV No. 2 Line Upgrade

- Estimated Cost: \$19,000,000
- Proposed Energization: 2016
- This project upgrades a 115 kV line.
- This project is part of the wood pole replacement program and will also improve reliability for the Salem/Albany area.

Salem-Albany 115 kV No. 1 Line Upgrade

- Estimated Cost: \$23,600,000
- Proposed Energization: 2017
- This project upgrades a 115 kV line.
- This project is part of the wood pole replacement program will also improve reliability for the Salem/Albany area.



Eugene Area

Alvey Substation 230 kV Bus Sectionalizing Breaker Addition

- Estimated Cost: \$1,600,000
- Proposed Energization: 2017/2018
- This project installs a new 230 kV bus sectionalizing breaker.
- This project will improve reliability for the Eugene area.



Olympic Peninsula Area

Sappho 69 kV Shunt Capacitor Addition

- Estimated Cost: \$1,900,000
- Proposed Energization: 2017
- This project installs a new 69 kV shunt capacitor (7 Mvar) at Sappho Substation.
- This project will provide voltage support for the Olympic Peninsula area.



Tri-Cities Area

White Bluffs 230/115 kV Transformer Low-Side Disconnect Switch Replacement

- Estimated Cost: \$85,000
- Proposed Energization: 2017
- This project replaces a 230/115 kV transformer low-side disconnect switch.
- This project will improve reliability for the Tri-Cities area.



Longview Area

Longview 230/115 kV Transformer Bank Addition

- Estimated Cost: \$8,000,000
- Proposed Energization: 2021
- This project installs a new 230/115 kV transformer bank at Longview Substation.
- This project will improve reliability for the Longview area.



Southwest Washington Area

Holcomb-Naselle 115 kV Line Upgrade

- Estimated Cost: \$2,515,000
- Proposed Energization: 2016/2017
- This project upgrades a 115 kV transmission line.
- This project is part of the wood pole replacement program and will also improve reliability for the Southwest Washington area.



Spokane/Colville/Boundary Area

Bell Substation 230 kV Bus Sectionalizing Breaker Addition

- Estimated Cost: \$1,600,000
- Proposed Energization: 2016
- This project installs a new 230 kV bus sectionalizing breaker (This separates bus section No. 1 into two separate bus sections).
- This project will improve reliability for the Spokane/Colville/Boundary area.



Southeast Idaho/Northwest Wyoming Area

Lower Valley Area Reinforcement Project

- Estimated Cost: \$70,300,000
- Proposed Energization: 2018
- This project constructs a new 138/115 kV substation called Hooper Springs Substation and a new double circuit 115 kV line.
- This project will improve reliability for the Southeast Idaho/Northwest Wyoming area.



North Idaho Area

Libby FEC 115 kV Shunt Capacitor Addition

- Estimated Cost: \$1,500,000
- Proposed Energization: 2023
- This project installs a new 115 kV shunt capacitor (12 Mvar) at Libby Substation.
- This project will provide voltage support for the North Idaho area.



South Oregon Coast Area

Lane-Wendson 115 kV No. 1 Line Upgrade

- Estimated Cost: \$20,602,000
- Proposed Energization: 2016/2017
- This project upgrades the Lane-Wendson 115 kV No.1 line.
- This project is part of the wood pole replacement program and will also improve reliability for the South Oregon Coast area.



Updates to Previous Projects

Seattle/Tacoma Area

<u>Project</u>	<u>Schedule</u>
Tacoma 230 kV Bus Tie and Auxiliary Bus Sectionalizing Disconnect Switch (O&M Flexibility)	2016/2017
Raver 500/230 kV Transformer Addition	2017
Maple Valley Bus Section Breaker Addition (3 Bus Sections)	2024+

Portland Area

<u>Project</u>	<u>Schedule</u>
Keeler 230 kV Bus Sectionalizing Breaker Addition	Completed
Pearl 500 kV Upgrades	2016
Keeler 500/230 kV Transformer Re-termination	2017/2018
Carlton 230 kV and 115 kV Breaker Additions (O&M Flexibility)	2018
Troutdale 230 kV Series Bus Sectionalizing Breaker Addition	2018



Updates to Previous Projects

Vancouver Area

Project

Schedule

Sifton 230 kV Reconfiguration (O&M Flexibility)

2018

Eugene Area

Project

Schedule

Lane 230 kV Bus Section Breaker Addition

2017

Alvey 115 kV Bus Section Breaker Addition (O&M Flexibility)

2019

Olympic Peninsula Area

Project

Schedule

Kitsap 115 kV Capacitor Relocation

2018



Updates to Previous Projects

Tri-Cities Area

<u>Project</u>	<u>Schedule</u>
Franklin 115 kV Shunt Capacitor Additions	Completed
Richland Area Switch Reconfiguration	2016
Badger Canyon 115 kV Bus Tie Breaker (O&M Flexibility)	2016
Grandview 115 kV Bus Tie Breaker (O&M Flexibility)	2017
Midway-Grandview 115 kV Line Rebuild	2017

Longview Area

<u>Project</u>	<u>Schedule</u>
Longview-Lexington 230 kV Line Re-termination	Completed
Lexington 230 kV Bus Tie Breaker Addition (O&M Flexibility)	2016



Updates to Previous Projects

Mid-Columbia Area

<u>Project</u>	<u>Schedule</u>
Columbia-Rapids 230 kV Line Construction	2016
Moxee 115 kV Bus Tie Breaker Addition (O&M Flexibility)	2017

Central Oregon

<u>Project</u>	<u>Schedule</u>
La Pine 115 kV Shunt Capacitor Addition	Completed
La Pine 230 kV Breaker and (3) 115 kV Breakers Addition (O&M Flexibility)	On Hold/Deferred



Updates to Previous Projects

Southeast Idaho/Northwest Wyoming Area

<u>Project</u>	<u>Schedule</u>
Drummond 115 kV Transformer Breakers (O&M Flexibility)	2018
Spar Canyon 230 kV Reactor Addition (O&M Flexibility)	2018
Teton 115 kV Bus Tie Breaker Addition (O&M Flexibility)	On Hold/Deferred
Lost River (3) 230 kV Breaker Additions and Breaker-and-a-Half Reconfiguration (O&M Flexibility)	On Hold/Deferred

South Oregon Coast Area

<u>Project</u>	<u>Schedule</u>
Fairview 115 kV Shunt Reactor Addition	2018
Toledo 230 kV and 69 kV Bus Tie Additions (O&M Flexibility)	On Hold/Deferred
Wendson 115 kV Bus Tie Breaker Addition (O&M Flexibility)	On Hold/Deferred



Updates to Previous Projects

De Moss/Fossil Area

Project

Schedule

Fossil 69 kV Shunt Reactor Addition

2018

De Moss 69 kV Shunt Capacitor Addition

2018

Okanogan Area

Project

Schedule

Twisp Shunt Capacitor Addition (Previously Winthrop)

Cancelled

South Idaho/Burley

Project

Schedule

Unity 138 kV Breaker Addition (O&M Flexibility)

On Hold/Deferred

Other Projects

Project

Schedule

UEC Line and Load Interconnections

2016



Next Steps

- Update the BPA Plan based on the 2015 planning cycle and post the draft by the end of the year 2015.
- Update assumptions, criteria and methodologies to be used in the next planning cycle (2016) and post.
- Jan.1, 2016 – Begin 2016 Planning Cycle

Sign up to participate in future meetings or receive additional information by:

Filling out the Participation Request form on BPA's Planning Process website and sending it via e-mail to:
PlanningParticipationRequest@bpa.gov

